

Translation

PATENT COOPERATION TREATY

PCT/JP2003/010604



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference R-17	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2003/010604	International filing date (day/month/year) 22 August 2003 (22.08.2003)	Priority date (day/month/year) 02 September 2002 (02.09.2002)
International Patent Classification (IPC) or national classification and IPC F16K 31/122		
Applicant FUJIKIN INCORPORATED		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand 22 March 2004 (22.03.2004)	Date of completion of this report 15 July 2004 (15.07.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/010604

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims		YES
	Claims	1-6	NO
Inventive step (IS)	Claims		YES
	Claims	1-6	NO
Industrial applicability (IA)	Claims	1-6	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP, 63-289388, A (Nippon Benkan Kogyo K.K.), 25 November, 1988 (25.11.88), full text, Figs. 1-4

Claims 1-5

Document 1 {see Fig. 4 (prior art)} describes a fluid controller that has a valve box (1) with a fluid passage, a vertically movable valve body presser (valve stem 5) for pressing down a valve body (bottom portion of valve stem 5) capable of opening and closing the fluid passage, a lower casing (15) provided above the valve box, an upper casing (15) connected with the lower casing, a valve stem (rod 7) disposed in the space formed by the upper and lower casings, with its bottom end kept in contact with the valve body presser, and a piston (14) fixed to the valve stem, wherein an upper space is formed between the top face of the piston and the bottom surface of the top wall of the upper casing, while a lower space is formed between the bottom face of the piston and the top face of the bottom wall of the lower casing, characterized in that a compression coil spring (16) for biasing the piston is disposed in the lower space, while a compressed air introducing path (17) is connected with the upper space.

Furthermore, document 1 describes a normally open fluid controller, in which the valve stem (7) and the piston (14) are integrally formed by press fitting (Fig. 4); one each spring-receiving annular depression is formed in the bottom face of the top wall of a casing (Fig. 3) and in the top face of the bottom wall of the lower casing (Fig. 4);

an upward opened internal thread portion (17') for connecting a compressed air introducing pipe and a compressed air introducing downward passage (Fig. 1) connected with the bottom end of the internal thread portion and opened in the upper space are formed in the top wall of the upper casing; and

the compression coil spring (16; Fig. 4) is received by the spring-receiving annular depressions formed in the bottom face of the piston and the top face of the lower casing.

So, the subject matters of claims 1-5 do not appear to be novel or to involve an inventive step.

Claim 6

Document 1 (see Fig. 3) describes a normally closed fluid controller, in which a spring-receiving annular depression is formed in the top face of a piston (14'); a compression coil spring (41) is received by this annular depression and a spring-receiving annular depression in the bottom face of an upper casing; a piston (14') has an upper small diameter portion (cylinder 37') fitted in a compressed air introducing downward passage of the upper casing; and a compressed air passage (39) with its top end communicating to the compressed air introducing downward passage in the top wall of the upper casing and with its bottom end communicating to a lower space. So, the subject matter of claim 6 does not appear to be novel or to involve an inventive step.